

Amendments to the Specification:

Page 8, amend the paragraph beginning on line 3 to read as follows:

A carrier fluid, fed through lines 22, 23, can be mixed with the used absorbent downstream from valves 5 and 6, respectively, in order to ensure pneumatic transport thereof. According to an embodiment of the invention, one of the discharge lines intended for the used absorbent (line 3) is used for recycling part of the absorbent to the boiler. In any case, a line 4 is provided to convey all or part of the absorbent to a storage hopper 9 used as a buffer to uncouple the operation of the regenerator from that of the thermal generator. This hopper is also used for increasing the seal between the (oxidizing) fumes circuit and the (reducing) regeneration gas circuit by preventing passage from one into the other. The safety of the device is thus increased by preventing spontaneous ignition or explosion risks.

Page 8, amend the paragraph beginning on line 17 to read as follows:

The used absorbent leaves hopper 9 through a line 10 that comprises for example a rotary lock or a valve means 11 and it is sent through pneumatic transport means to a filter-reactor 12. The gas used for carrying the used absorbent preferably consists of the regeneration gas, delivered through a line 13 that opens into line 11. This gas, referred to as regeneration gas, whose temperature ranges between 700 and 1500°C, preferably between 900 and 1100°C, is preferably obtained by partial combustion of H₂S, fed from line 24, in a burner 14 arranged on line 13. The sensible heat of the gas in line 13 is sufficient to heat the used absorbent prior to feeding it into filter-reactor 12. According to another possible embodiment, the used absorbent can be mixed with the regeneration gas at the inlet of the filter-reactor. This is for

example the case when connection line 13 between regeneration gas partial combustion device 14 and filter-reactor 12 is reduced to its simplest expression. This configuration allows to limit thermal wall losses and contributes to improving the overall energy performance of the plant. Still with a view to reducing thermal losses, the used absorbent and the regeneration gas can also be mixed directly inside the filter-reactor. In this case, the filter-reactor comprises a first mixing zone supplied by two distinct used absorbent and regeneration gas circuits; this first mixing zone is followed by the filtering elements proper.

Page 11, amend the paragraph beginning on line 17 to read as follows:

A 3510 kg/h flow of H_2S is fed through line 24 into burner 14 where it is partly oxidized by a 4000 kg/h air stream. The fumes obtained are discharged through line 13. They are at a temperature of $1128^{\circ}C$ and contain 15 % H_2S by weight, 0.4 % H_2 by weight, 1.2 % SO_2 by weight and 29 % sulfur by weight. These fumes are mixed with the used absorbent extracted from hopper 9 through line 11 and fed into filter-reactor 12. The inlet temperature is $790^{\circ}C$.